



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/691,032	10/19/2000	Takeshi Takezawa	198538US0	5150

22850 7590 07/16/2003

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

ALAVI, ALI

ART UNIT	PAPER NUMBER
----------	--------------

2875

DATE MAILED: 07/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/691,032

Applicant(s)

TAKEZAWA, TAKESHI

Examiner

Ali Alavi

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 April 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8 and 10-13 is/are rejected.
- 7) ☒ Claim(s) 3,9 and 14-31 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Applicant's appeal brief filed on 4/08/03 has been entered. Claims 1-31 are still pending in this application.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4-8, and 10-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Shaffner et al (U. S. Pat. No. 5,621,267).

Regarding claims 1-2, and 4-6, Shaffner et al disclose a high-power metal halide reflector lamp (40), a light source (42), a ceramic reflector (44), which is made of alumina (col. 3, line 10), a transmissive front panel (58), a cooling device forcibly cools down the reflector (58, fig. 2), a power source (which is inherent), wherein the reflector is formed of a ceramic having a thermal conductivity of at least 0.005(cal/cc.sec.C) at a temperature of 20 degrees C ( this limitation is inherent, since reflector has a compound of an Alumina or and other material in which is known to have such a physical characteristic).

Regarding claims 7-8, and 10-13, Shaffner et al disclose the claimed invention as applied above and further disclose that such high power metal halide lamps find application in optical projection systems when used in combination with a reflector as shown in figure 1.

***Allowabl Subject Matter***

3. Claims 3, 9, and 14-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 3 is objected to because it recites in part "...the ceramic is composed of any material selected from the group consisting of  $\text{Al}_2\text{O}_3$ ,  $2\text{Mgo.Sio}_2$ ,  **$\text{Mgo.Sio}_2$** ,  $\text{ZrO}_2.\text{Sio}_2$ .,  $\text{Tio}_2$ ,  $\text{SiC}$ ,  $\text{Si}_3\text{N}_4$ , and cermet." This limitation as specifically recited in claim 3 was not found in the prior art. Claims 14-22 are objected because being depended on claim 3.

Claim 9 is objected because it recites in part "...the ceramic is composed of any material selected from the group consisting of  $\text{Al}_2\text{O}_3$ ,  $2\text{Mgo.Sio}_2$ ,  **$\text{Mgo.Sio}_2$** ,  $\text{ZrO}_2.\text{Sio}_2$ .,  $\text{Tio}_2$ ,  $\text{SiC}$ ,  $\text{Si}_3\text{N}_4$ , and cermet." This limitation as specifically recited in claim 9 was not found in the prior art. Claims 23-31 are objected because being depended on claim Claim 9.

***Response to Arguments***

4. Applicant's arguments filed on 4/08/03 have been fully considered. With regards to the examiner's rejection of claims 1-2, and 4-8, Examiner maintains the rejection with the reference of Shaffner et al as under 102(b) as applied above. Applicant's argument has persuaded the examiner to object to claims 3, and 9-31. The examiner likes to direct applicant's attention to page 5-8 and 5-9 of "CRC Hadbook of Chemistry and Physics by David R. Lide, 73<sup>rd</sup> edition, which shows the thermal property of chemical substances which are well established and are known.

Art Unit: 2875

**Conclusion**

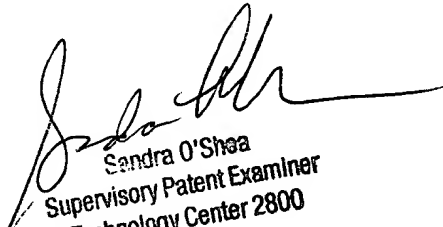
**5. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

**6.** Any inquiry concerning this communication or earlier communication from the examiner should be directed to Ali Alavi whose telephone number is (703) 305-0522. The examiner can normally be reached between 8:00 A.M. to 4:30 P.M. Monday to Friday. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Sandy O'Shea can be reached at (703) 305-4939 or you may fax your inquiry to the receptionist at (703) 308-7382.

Ali Alavi

7/13/03

  
Sandra O'Shea  
Supervisory Patent Examiner  
Technology Center 2800